REMARKS

Claims 1, 2, and 4-17 are pending. Claim 4 has been amended herein to recite: "creating a drug rule syntax comprising (a) drug rule syntax elements, each corresponding to a subset of a logical proposition, and (b) allowable logical relationships between said drug rule syntax elements." No new matter has been presented.

The claims stand rejected under 35 USC 103(a) as unpatentable over Richards, U.S. Patent No. 6,507,829 and Kapp, U.S. Patent Publication No. 2002/0010595 and further in view of Barry, U.S. Patent No. 6,188,988. Applicants respectfully request reconsideration and withdrawal of the outstanding rejections in view of the amendments and remarks herein.

The present claims are all directed to methods for processing a drug information source, the method comprising, *inter alia*:

> creating a drug rule syntax comprising (a) drug rule syntax elements, each corresponding to a subset of a logical proposition, and (b) allowable logical relationships between said drug rule syntax elements.

The claims all further require parsing drug rule information or adverse event data from a drug information source into the drug rule syntax.

The present invention may be used to identify drug rules and/or drug rule content in a drug information source and to parse that information into computer-readable syntax, e.g., "if ___, and if ___, and not ____, then _____." According to this invention, existing medical information, including drug rules and adverse event data, that is contained various medical information sources can be parsed into standardized computer-readable drug rule syntaxes.

Neither Richards nor Kapp nor Barry discloses or suggests the invention.

The Office Action asserts that Richards teaches "creating a syntax," citing column 9, lines 10-15. Applicants respectfully submit that Richards does not disclose creating a "syntax." Col. 9, lines 10-15 of Richards merely discloses an adverse event report, or "verbatim," that has been

parsed into various fragments which are then weighted. There is nothing about this disclosure that indicates or suggests creating a "syntax."

The office action also asserts that Richards teaches "and parsing . . . elements from at least one identified instance of . . . content into the . . . rule syntax, retaining associations between those drug rule elements that form a . . . whereby a subset of the drug information source is processed into syntax-parsed . . . (col. 5, lines 35-40; col. 6, lines 20-29)." Applicants respectfully submit that Richards does not disclose parsing elements of content into a rule syntax. As discussed above, Richards discloses parsing adverse events into segments and then ranking the segments. Richards does not disclose retaining the associations between drug rule element. The portions of the Richards specification cited only refer to the breaking up of verbatims into segments so that each segment may be ranked.

The Office Action admits that Richards does not disclose drug rules, and cites Kapp for the proposition that drug rules are known.

The Office Action then admits that both Richards and Kapp fail to disclose or suggest "drug rule syntax elements corresponding to a subset of a logical proposition and allowable logical relationships between said drug rule syntax elements." (See Office Action, page 3, lines 10-12.) Applicants respectfully note that what Richards and Kapp fail to disclose is ***creating a drug rule syntax comprising*** (a) drug rule syntax elements, each corresponding to a subset of a logical proposition, and (b) allowable logical relationships between said drug rule syntax elements, ***and parsing drug rules*** or adverse event data from a drug information source ***into said drug rule syntax***.

However, the Office Action interposes the Barry reference, asserting that it

> "does teach this limitation (at col. 10, lines 35-52, as knowledge base may have subjective rules, objective rules and system generated rules. An example of an objective rule : if . . . then reject the therapy).

See Office Action, page 3, lines 18-20.

Applicants acknowledge that Barry discloses drug rules and the use of drug rules to recommend therapies. At column 10, lines 42-52, Barry states:

> A knowledge base may have subjective rules, objective rules, and system-generated rules. Objective rules are based on industry established facts regarding the treatment of HIV using antiretroviral therapy and are drawn from the package insert information of antiretroviral drug manufacturers and from peer reviewed and published journal articles. An example of an objective rule would be an antiretroviral to antiretroviral contraindication such as:
>
> Rule #1: If the eval therapy contains Zidoviudine (AZT) and Stavudine (d4T), then rejet the therapy.

Barry, col. 10, ll. 42-52. Applicant respectfully submits that this disclosure merely teaches drug rules and the use of drug rules to obtain therapy recommendations.

Applicant notes further that this passage of Barry specifically states that "objective rules are based on industry established facts . . . and are drawn from the package insert information . . . and from peer reviewed and published journal articles." But, Barry contains no disclosure as to HOW those objective rules are drawn from such medical source materials and placed into the knowledge base.

In contrast to the disclosure of Barry, which focuses on the use of drug rules to recommend therapies, the present invention is directed to HOW drug rule information contained in medical source documents is processed into a knowledge base. In the prior art, this process was undertaken laboriously by hand, whereby each drug rule was created anew, transcribed from a source into a database, or electronically copied entire from a source into the database, either alone or together with other information from the source material.

While these methods for importing drug rule information into knowledge bases such as the type described in Barry may have been known or described, nowhere in the prior art is there any disclosure or suggestion of a computer assisted method for processing drug rule information into a drug rule syntax comprising drug rule syntax elements and allowable logical relationships

between the drug rule syntax elements, and parsing drug rule elements from a drug information source into the drug rule syntax, and retaining associations be tween drug rule elements.

Applicants respectfully submit that Barry does not disclose creating a drug rule syntax comprising (a) drug rule syntax elements, each corresponding to a subset of a logical proposition, and (b) allowable logical relationships between said drug rule syntax elements, and parsing drug rules or adverse event data from a drug information source into said drug rule syntax.

Indeed, Barry specifically discloses that the drug rules used according to that invention are "a collection of rules and methods authored by a clinical advisory panel of HIV-treating physicians and scientists." Thus, Barry specifically teaches aways from the present invention which recites a computer assisted method of processing drug information comprising creating a drug rule syntax comprising drug rule syntax elements and the possible logical relationships between them, parsing drug rule elements from drug rule content from a drug information source into the drug rule syntax, and retaining associations described in the drug rule content between drug rule elements.

Thus, none of Richards, Kapp, or Barry, or any combination thereof, discloses or suggests the subject matter of the claims.

In view of the foregoing, each of the claims in this application is in condition for allowance. Accordingly, Applicants solicit early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing **Docket No. 597932000320**.

Respectfully submitted,

Dated: December 19, 2008 By:

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